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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,785	11/20/2003	Richard Veil	4965-000168	8606
27572	7590	04/10/2006		
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			EXAMINER DEBERADINIS, ROBERT L	
			ART UNIT	PAPER NUMBER
			2836	

DATE MAILED: 04/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/717,785

Applicant(s)

VEIL ET AL.

Examiner

Robert DeBeradinis

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 3/26/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/10/03</u>  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to because THE FUNCTIONAL BLOCKS ARE NOT LABELED WITH THEIR FUNCTIONAL NAMES. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15, 16 are rejected under 35 U.S.C. 102(b) as being anticipated by  
KLATTENHOFF 6,507,468.

Regarding claims 15, 16.

KLATTENHOFF discloses providing a first current path for energizing the load, said first current path comprising at least one switching element for safely switching-off; providing a second current path in parallel to the first current path, for energizing the load, the second current path comprising at least one switching element; alternately testing the switching-off ability of one of both current paths, the other current path not being tested solely energizing said load during this test phase.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over KLATTENHOFF 6,507,468.

Regarding claim 1.

KLATTENHOFF discloses a controller has two shunt lines connected in parallel with safety relays for testing their switching capacity, during the test the parallel shunt line is closed so that the safety power line is not interrupted (abstract) an evaluation and control device for testing the switching-off ability of at least one switch element (3) said evaluation and control device carries out the test of the switching elements alternating in one of both current paths so that the other of both current paths supplies the load.

KLATTENHOFF switch arrangement does not teach the third and fourth switching element are provided which are connected to each other in series are connected in parallel to the series connection consisting of said first and second switching elements to form the shunt path.

It is obvious that both arrangements are functionally equivalent since both switching circuits function to allow a safety switch to be selected for testing and evaluated and to alternate the flow of current to another current path to supply current to the load. The functional equivalence of the circuits would be within the level of a person of ordinary skill in the art and it would have been obvious for one to select the desired arrangement of switching elements to provide the function to select the switching element to test and to shunt the current to another path.

Claims 2-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over KLATTENHOFF 6,507,468 in view of LEHNER 5,777,834.

Regarding claims 2-14.

KLATTENHOFF discloses the safety switching module of claim 1.

KLATTENOFF is silent in that said first and third switching elements are provided as semiconductor elements.

LEHNER teaches dual channel safety switch arrangement described therein has actuators and include switch like means comprising semiconductor elements. In contrast to relays, these semiconductor elements have no contacts that are subjected to wear (col. 1, lines 1-55).

It would have been obvious to one having ordinary skill in the art at the time of this invention to have modified the switching elements to provide a semiconductor to replace the relay element. The motivation would be to provide a switching element that has no contacts to wear.

Any inquiry concerning this communication should be directed to Robert L. DeBeradinis whose number is (571) 272-2049. The Examiner can normally be reached Monday-Friday from 8:30 am to 5:00 pm.

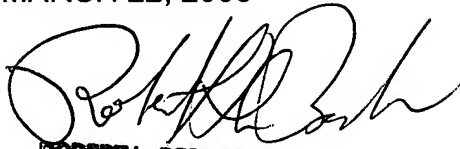
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Brian Sircus, can be reached on (571) 272-2058. The Fax phone number for this Group is (703) 872-9306.

RLD

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ROBERT L. DEBERADINIS  
PRIMARY EXAMINER